

Abstract of the Disclosure

A method for controlling a fuel cell system and systems for executing the method are described. The object is to provide systems which, when high-pressure gas generating systems are used, reliably prevent mechanical damage to a fuel cell in the event of gas break-through to the low-pressure side. This is achieved in that, in the event of malfunction, i.e., bursting of a diaphragm (14) of a reformer unit (1), the differential pressure between the side of the diaphragm (14) of the reformer unit (1) facing the anode side (18) and the cathode side (19) of the fuel cell module (2) is held below a predefined value. Systems, which contain a pressure relief valve (29) controlled by a sensor (28), or a bursting disk (36) and a flow resistance (22), or another controllable valve (37) on the low-pressure side upstream from the anode side (18) of fuel cell unit (2) are provided for executing the method.

Figure 1